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(54) SUPER-JUNCTION SEMICONDUCTOR DEVICE
AND MANUFACTURING METHOD THEREOF

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(57) Abstract:

PROBLEM TO BE SOLVED: To ease realization of mass production by clarifying the effect of parameters of a super-junction semiconductor device having a drift layer comprising parallel pn layers which depletes in OFF state while conducting current in ON state.

SOLUTION: The impurity amount in an (n) drift region 12a is in the range of 100-150% or of 110-150% of the impurity amount in a (p) partitioning region. Or, the impurity concentration in either of the (n) drift region 12a or the (p) partitioning region 12b is in the range of 92-108% of the impurity concentration in the other region. Besides, width of the one is in the range of 94-106% of the width of the other.

